

To: [Redacted] **Ex. 6 - Personal Privacy**  
[Redacted] **Ex. 6 - Personal Privacy** Arguto,  
William[Arguto.William@epa.gov]; [Redacted] **Ex. 6 - Personal Privacy**  
bucher@niehs.nih.gov[bucher@niehs.nih.gov]; Burns, Francis[Burns.Fran@epa.gov]; Capacasa,  
Jon[Capacasa.jon@epa.gov]; Caporale, Cynthia[Caporale.Cynthia@epa.gov];  
**Ex. 6 - Personal Privacy** christopher.weis@nih.gov[christopher.weis@nih.gov];  
[Redacted] **Ex. 6 - Personal Privacy**; Cox, Edward C MAJ  
USARMY NG VAARNG (US); [Redacted] **Ex. 6 - Personal Privacy**  
[Redacted] **Ex. 6 - Personal Privacy**;  
[Redacted] tierney@wv.gov[tierney@wv.gov];  
**Ex. 6 - Personal Privacy** Cseh, Larry F CAPT (US)[loc3@cdc.gov];  
[Redacted] hwater.com];  
[Redacted] martha.a.mcelfresh@wv.gov[martha.a.mcelfresh@wv.gov];  
masten@niehs.nih.gov[masten@niehs.nih.gov]; miller.aubrey@nih.gov[miller.aubrey@nih.gov];  
**Ex. 6 - Personal Privacy**  
[Redacted] n]; Singhvi, Raj[Singhvi.Raj@epa.gov];  
**Ex. 6 - Personal Privacy** [Redacted] **Ex. 6 - Personal Privacy**  
[Redacted] vck3@cdc.gov[vck3@cdc.gov];  
[Redacted] walter.m.ivey@wv.gov[walter.m.ivey@wv.gov]; Werner, Lora[Werner.Lora@epa.gov]  
**From:** Grant, Gregory L LTC USARMY (US)  
**Sent:** Sat 1/25/2014 4:35:54 PM  
**Subject:** Re: PPH Discussion Group

CDC/ATSDR/EPA,

Does anyone on this group have update on toxicology information for the PPh. We are still waiting on this information to provide to labs as far as non detect threshold being set. Any update would be appreciated even if no further action has been decided.

Thanks,

Greg Grant, LTC, WVARNG  
Commander  
35th Civil Support Team (WMD)  
5 Armory Drive  
Saint Albans, WV. 25177

**Ex. 6 - Personal Privacy**

FAX: 304-201-5159

Sent from my blackberry

**From:** [Redacted] **Ex. 6 - Personal Privacy**  
**Sent:** Saturday, January 25, 2014 11:10 AM  
**To:** [Redacted] **Ex. 6 - Personal Privacy**; arguto.william@epa.gov  
<arguto.william@epa.gov>; [Redacted] **Ex. 6 - Personal Privacy**  
bucher@niehs.nih.gov <bucher@niehs.nih.gov>; burns.fran@epa.gov <burns.fran@epa.gov>;  
capacasa.jon@epa.gov <capacasa.jon@epa.gov>; caporale.cynthia@epa.gov <caporale.cynthia@epa.gov>;  
[Redacted] **Ex. 6 - Personal Privacy** christopher.weis@nih.gov <christopher.weis@nih.gov>;  
[Redacted] **Ex. 6 - Personal Privacy**; Cox, Edward C MAJ USARMY NG  
VAARNG (US); [Redacted] **Ex. 6 - Personal Privacy**; Grant, Gregory L LTC

USARMY (US); letitia.tierney@wv.gov <letitia.tierney@wv.gov>; [Ex. 6 - Personal Privacy]  
[Ex. 6 - Personal Privacy] Cseh, Larry F CAPT (US); [Ex. 6 - Personal Privacy]  
[Ex. 6 - Personal Privacy] com>; martha.a.mcelfresh@wv.gov <martha.a.mcelfresh@wv.gov>;  
masten@niehs.nih.gov <masten@niehs.nih.gov>; miller.aubrey@nih.gov <miller.aubrey@nih.gov>;

## Ex. 6 - Personal Privacy

singhvi.raj@epa.gov <singhvi.raj@epa.gov>; [Ex. 6 - Personal Privacy]  
[Ex. 6 - Personal Privacy] vck3@cdc.gov <vck3@cdc.gov>;  
walter.m.ivey@wv.gov <walter.m.ivey@wv.gov>; werner.lora@epa.gov <werner.lora@epa.gov>  
**Subject:** RE: PPH Discussion Group

We have completed our analysis of the samples for 1/10/14 through 1/16/14. The detection limit of 0.6 ppm of the DiPPH was confirmed, using a 0.6 ppm DiPPH and 0.6 ppm PPH spiked standard. The standard was run before and after the water samples to ensure the detection was not lost due to any instrument problems that could have occurred during the sample sequence.

To interpret the accurate limits of detection for the water samples, it is recommended the MCHM tank compositions be verified in a duplicate analysis or be determined independently.

Our initial analysis of the MCHM tank concluded that the ratio of DiPPH to PPH was 50:50. So the detection at this composition would be 1.2 PPM for the combined PPH + DiPPH.

Our current understanding of the MCHM tank contents suggest that the PPH to DiPPH ratio is closer to 5 : 95 to 10 : 90. Using this ratio the detection limits for the combined PPH + DiPPH would be 0.7 ppm.

The "PPH" tank sample was analyzed earlier and the PPH to DiPPH was in agreement with the 5 : 95 to 10 : 90 ratio. However, a ratio much higher in PPH is not out of question and can be reasoned based on the manufacturing process. This is why we are recommending the MCHM tank sample be further analyzed for an accurate determination of the PPH to DiPPH ratio.

The water sample detection limits assume is that the MCHM tank contents were well mixed, the composition was uniform throughout the tank when breeched, and the current MCHM sample represents the spill composition..

The results are tabulated below.

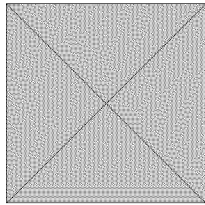
**Priority Samples****Top Priority**

	<b>Date</b>	<b>Time</b>	<b>Result</b>
0.6 ppm (DiPPH spiked)	1/24/2014	-	Detected
P003 Finished	1/10/2014	0845	Not Detected
P004 Finished	1/10/2014	1040	Not Detected
P005 Raw	1/10/2014	0845	Not Detected
P006 Raw	1/10/2014	1040	Not Detected
Raw	1/11/2014	0905	Not Detected
Finished	1/11/2014	0920	Not Detected
Raw	1/11/2014	1000	Not Detected
Finished	1/11/2014	1000	Not Detected
Raw	1/12/2014	1600	Not Detected
Finished	1/12/2014	1600	Not Detected
Raw	1/12/2014	2200	Not Detected
Finished	1/12/2014	2200	Not Detected
P007 Raw	1/13/2014	0210	Not Detected
Finished	1/13/2014	0210	Not Detected
P008 Finished	1/13/2014	0600	Not Detected
P009 Raw	1/13/2014	0600	Not Detected
Raw Morning	1/14/2014	0600	Not Detected
Finished Morning	1/14/2014	0800	Not Detected
Raw Afternoon	1/14/2014	1800	Not Detected
Finished Afternoon	1/14/2014	1800	Not Detected
Raw Morning	1/15/2014	0600	Not Detected
Finished Morning	1/15/2014	0600	Not Detected
Raw Afternoon	1/15/2014	1800	Not Detected
Finished Afternoon	1/15/2014	1800	Not Detected
Raw Morning	1/16/2014	0500	Not Detected
Finished Morning	1/16/2014	0500	Not Detected
Raw Afternoon	1/16/2014	1700	Not Detected
Finished Afternoon	1/16/2014	1700	Not Detected
0.6 ppm (DiPPH spiked)	1/25/2014	-	Detected

If anyone has any question please contact me at Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

--



**Ex. 6 - Personal Privacy**

PROCESS ENGINEER

MATRIC | Mid-Atlantic Technology, Research &  
Innovation Center

**Ex. 6 - Personal Privacy**

| Mobile:

P.O. Box 8396, South Charleston, WV 25303

[www.matricinnovates.com](http://www.matricinnovates.com) | [Twitter](#) | [LinkedIn](#)